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FORMERLY WILLOW RUN LABORATORIES, THE UNIVERSITY OF MICHIGAN

P. O. BOX 618 • ANN ARBOR • MICHIGAN • 48107

PHONE (313) 483-0500

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Developing Processing Techniques for Skylab Data
Monthly Progress Report, September 1973

EREP Investigation 456 M
NASA Contract NAS9-13280

Prepared by

Richard F. Nalepka - Principal Investigator
William A. Malila - Co-Principal Investigator

NASA Technical Monitor

Mr. Timothy White/TF6
National Aeronautics and Space Administration
Johnson Space Center
Principal Investigator Management Office
Houston, Texas 77058

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Developing Processing Techniques for Skylab Data
Monthly Progress Report, September 1973

The following report serves as the seventh monthly progress report for EREP Investigation 456M which is entitled "Developing Processing Techniques for Skylab Data". The financial report for this contract (NAS9-13280) is being submitted under separate cover.

The purpose of this investigation is to test information extraction techniques for SKYLAB S-192 data and compare with results obtained in applying these techniques to ERTS and aircraft scanner data.

During this report period we examined the aerial photography and four sample bands of scanner imagery which were gathered by the ERIM aircraft on August 5, in conjunction with the SKYLAB S-192 data collection pass. The data quality was good, however the coverage was not as requested.

The original plans for the collection of aircraft scanner data were for the coverage of the intensive test area from an altitude of 5,000 ft. making five parallel passes of 20 miles each separated by one mile. In addition, the center of the five flight lines was to have been covered at three other altitudes (1,000 ft., 2,000 ft., and 10,000 ft.).

Because of the somewhat hazy atmospheric conditions existing at the test site on the morning of the 5th, the pilot was having difficulty locating the flight lines from 5,000 ft. As a result the flight test conductor decided to gather the five parallel lines from 2,000 ft. with one half mile spacing (keeping the center line the same location as requested). This, of course, reduced the total area covered by more than a factor of two. This will have the effect of limiting the size of the region over which the results can be compared in applying information extraction techniques to SKYLAB S-192, ERTS MSS, and aircraft scanner data. At the moment it doesn't appear that this will seriously affect our ability to draw meaningful conclusions as a result of this investigation.

Also, during the month of August, supporting high altitude photos of the test site were gathered by personnel from the NASA-Ames Research Center in their U-2 aircraft. These photos were received, examined and evaluated during September. The quality of the available photographs was good and there was more than sufficient coverage of the intensive test area.

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In the coming months we will continue preparing for receipt of the SKYLAB S-192 data and we will begin processing and analyzing aircraft scanner data gathered on August 5 as well as ERTS-MSS data gathered over the same site at about the same time of the crop growing season (ERTS passes over the test site were scheduled for August 1 and 19, however we don't know at this time whether acceptable data were gathered).

Submitted by: Richard F. Nalepka
Richard F. Nalepka
Principal Investigator

Approved by: Paul R. Legault for
Richard R. Legault
Director
Infrared and Optics Division

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